



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 08/716,209 Confirmation No. 5539
Applicant : Laurent PRADIER
Filed : October 9, 1996
TC/A.U. : 1647
Examiner : Stephen Gucker

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**NOTICE OF APPEAL AND
RESPONSE TO REQUEST FOR INFORMATION**

Sir:

In response to the Final Office Action dated April 23, 2003, applicants appeal the rejection and respond to the Request for Information. A request for extension of time is also enclosed with this paper. Accordingly, applicants have timely and completely responded to the Final Office Action.

Notice of Appeal

Applicants hereby appeal the decision of the Examiner in the Final Office Action dated April 23, 2003, rejecting all the pending claims. The required fee for filing a Notice of Appeal in accordance with 37 C.F.R. § 1.17(b) is attached. If necessary, the undersigned hereby authorizes the Commissioner to debit Deposit Account no. 50-1129 for the Appeal fee and/or for any fee variance in the amount required and that submitted.

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Response to Request for Information

The Examiner submits another Request for Information. However, as shown by the statements from the previous Request for Information (Paper No. 38), applicants have already answered one of the questions in this Request. Furthermore, as noted in detail below, both of the specific questions asked are not necessary, improper, and/or not reasonable under the circumstances. Applicants respectfully request the withdrawal of the Request for Information.

The Examiner first asks to know, if possible, "does the Ad.RSVbgal vector of Le Gal La Salle (Science 259: 988-990) have a "deleted" or "non-functional" E1 gene as defined by Applicant's own specification (page 9, line 26 to page 10, line 1)?" (Page 7 of Paper No. 41.) In the Request for Information of Paper No. 38, the Examiner stated in characterizing applicants' response to the first Request for Information about the same Science document:

Applicants have answered only that the E1 gene was deleted and that the E2 gene was not deleted (Paper No. 36, filed 5/23/02, pages 7-8). No attempt was made to state on the record whether the E2, E4, or L1-L5 genes were non-functional, whether the adenovirus comprised an ITR and a sequence permitting encapsulation, or whether the adenovirus was type Ad 2 or Ad 4. (emphasis added)

It seems clear that the Examiner already understands the answer to the first question posed in the latest Request for Information. Applicants respectfully submit that this additional Request for Information is therefore not reasonable and improper.

To further respond and avoid abandonment of the application, applicants continue in responding to the Request by pointing out that, at page 7 of the Response filed May 23, 2002, applicants clearly stated in the response to the first Request for Information: "an E1 deleted adenovirus was used in the work reported in the *Science* document [the same Le Gal La Salle Science document], which virus [AdRSVbgal] is now referred to as a 'first generation' adenovirus. A first generation adenovirus is one with an E1 gene deletion." Thus, the answer to the first question in the Request for Information is that the E1 gene has been deleted in Ad.RSVbgal.

The Examiner refers to "discrepancies" (see page 6 of Paper No. 41) in applicants' previous response, specifically in the sentence "The adenoviral vectors of Le Gal La Salle

differ when comparing the same set of genes because of at least the fact that the vectors of Le Gal La Salle possess only a deleted or non-functional E1 gene." To clarify, applicants were referring to the same part of the specification noted by the Examiner in the Request (pages 9 and 10). At pages 9 and 10, applicants refer to gene deletion and rendering genes non-functional. The sentence above refers to the same gene deletion and rendering genes non-functional possibilities.

The Examiner states that applicant has acted as his own lexicographer and that "deleted" and "non-functional" cannot mean the same thing in relation to the E1 gene (Paper No: 41 at page 6). Applicants respectfully disagree with this characterization of the specification. First, as noted in the Le Gal La Salle paper discussing a first generation "replication defective" adenovirus, the E1 gene or E1 region is known to be involved with replication. Thus, the statements at page 9, lines 26 to page 10, line 1 of the specification clearly apply to the E1 gene since the paragraph is discussing how adenoviruses are rendered replication defective and the E1 gene is one of those genes that can be manipulated to render an adenovirus replication defective. Second, the English specification specifically notes (at page 9, lines 20 to page 10, line 1) that the sequences necessary for replication "can be either removed (completely or partly), or rendered non-functional, or substituted by other sequences and especially by the DNA sequence encoding BDNF." The use of "either . . . or . . . or" need not be read as "one or the other," as the Examiner has apparently read it. In fact, there are two reasons why, from a purely English grammar perspective, this statement in the specification should not be read as a mutually exclusive group or as "one or the other" in this case.

First, "either" as a conjunction can be applied to more than two elements in a series and as a word can mean "one and the other." (see Webster's II New Riverside University Dictionary, Houghton Mifflin Company 1988, copy of page 420 attached, where hyphenated words "either-or" are defined as a mutually exclusive choice). Thus, the statement can be fairly read as: 1) removed (completely or partially); 2) rendered non-functional; or 3) substituted by other sequences. These cannot be mutually exclusive, since, *inter alia*, a substituted gene or sequence is, by definition, one that has been removed and replaced. Thus 3) cannot be mutually exclusive of 1). Second, the statement can also be fairly read as meaning the sequences can be: 1) removed (completely or partly) or rendered non-

functional; or 2) substituted by other sequences. This follows from traditional grammar rules concerning the use of the word "either," which hold that either can be used to refer to one of two items. (see, for example, The American Heritage Book of English Usage, A Practical and Authoritative Guide to Contemporary English, by Houghton Mifflin Company 1996). Again, 1) and 2) are not mutually exclusive as a substituted gene has by definition been deleted and replaced. Thus, in this case, the "removed (completely or partly)," which refers to a deletion, is an alternative way of saying "rendered non-functional." That also follows logically from what a deletion would do to the functioning of a gene (or gene product). If a gene is deleted it can be rendered non-functional. Again, these are not mutually exclusive concepts in the field and nothing in the specification states that they are defined as mutually exclusive here. In addition, there is no logical reason to require that some subset of the 1), 2), and 3) discussed above is a mutually exclusive choice while another subset is not. Requiring a mutually exclusive reading is apparently why the Examiner has concluded the E1 gene must be "deleted" or "non-functional" and not both. The statement the Examiner refers to should not be taken as one that defines "deleted" as a mutually exclusive possibility from "rendered non-functional."

Respectfully, applicants submit that there was no "discrepancy" in the response to the previous request for information and that the nature of the E1 deletion in the Ad.RSVbgal vector has already been completely addressed.

The Examiner also asks the identity of the co-author of the Le Gal La Salle document. The Examiner, however, provides no basis for requesting this information as reasonably necessary for the examination of this case. On that basis, applicants respectfully request that this Request for Information be withdrawn.

To answer the Request for Information and to avoid abandonment, the co-author of the Le Gal La Salle document providing information on the Request for Information is Michel Perricaudet.

Applicants submit that they have filed a complete response to the Request for Information or have made a *bona fide* attempt to answer completely. Applicants also reiterate that the Request for Information in Paper No. 41 is improper and request that the questions be withdrawn.

Appl. No. 08/716,209
Notice of Appeal dated October 23, 2003
Response to Final Office Action of April 23, 2003

A Request for Extension of Time is attached. If any other fees, requests, or petitions, including fees for adding new claims, are necessary to enter and consider this paper, the Commissioner is hereby authorized to charge Deposit Account No. 50-1129 for any fees. If, however, any petitions or extensions of time are required or any fees are due in order to enter or consider this paper or enter or consider any paper accompanying this paper, including fees for net addition of claims, or in order to keep this application pending, applicants hereby request any extensions or petitions necessary.

Respectfully submitted,
WILEY REIN & FIELDING LLP

Date: Oct. 23, 2003

By: 
David J. Kulik Reg. No. 36,576

Enclosure: Excerpt of Webster's II Dictionary

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